

Revision of the Genus *Pandanus* Stickman, Part 3 A New Species from Oeno Island, Tuamotu Archipelago

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PREVIOUS PARTS of this revision of *Pandanus* have appeared in *Pacific Science*. A single species is here published in order that its name may be available for use in another projected publication.

PANDANACEAE (SECTION *Pandanus*)

Pandanus feruliferus sp. nov.

Fig. 11

DIAGNOSIS HOLOTYPE: Arbor 10 m. altus 30 cm. diam. corona rotundata, foliis longioribus

¹ B. P. Bishop Museum, Honolulu 17, Hawaii, U.S.A. Manuscript received December 12, 1959.

92 × 5.4 cm. longe diminuentibus in basi paene latioribus subcoriaceis, nervo mediale in parte tertia infera inerme in media cum dentibus acicularibus luteis adpressis 1.5–2 mm. longis 14–38 mm. distantibus in parte tertia ultima dentibus nigris 1 mm. longis 1.5–4 mm. distantibus, marginibus in basi inermibus sed in parte quarta infero cum dentibus subulatis luteis adpressis 2–2.5 mm. longis 2–7 mm. distantibus in parte media simulantibus sed nigris in parte quarta ultima ad eos marginis simulantibus, syncarpio terminale, phalangibus 6–6.2 cm. longis 2.3–3.7 cm. latis 2.1–3 cm. crassis oblanceo-ellipsoideis paene compressis epiderme

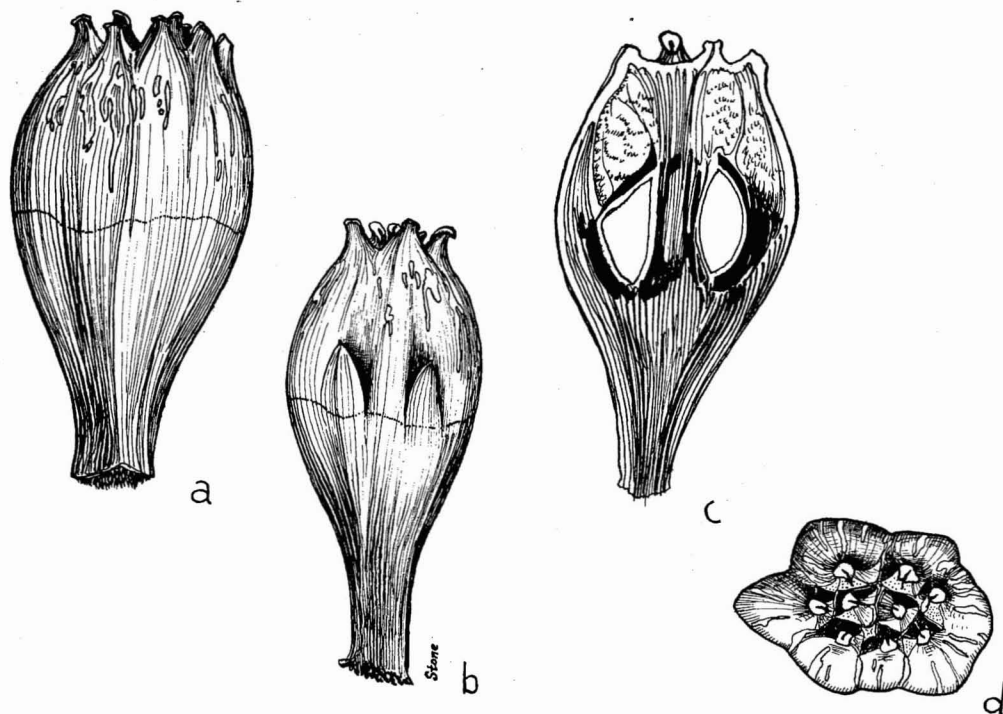
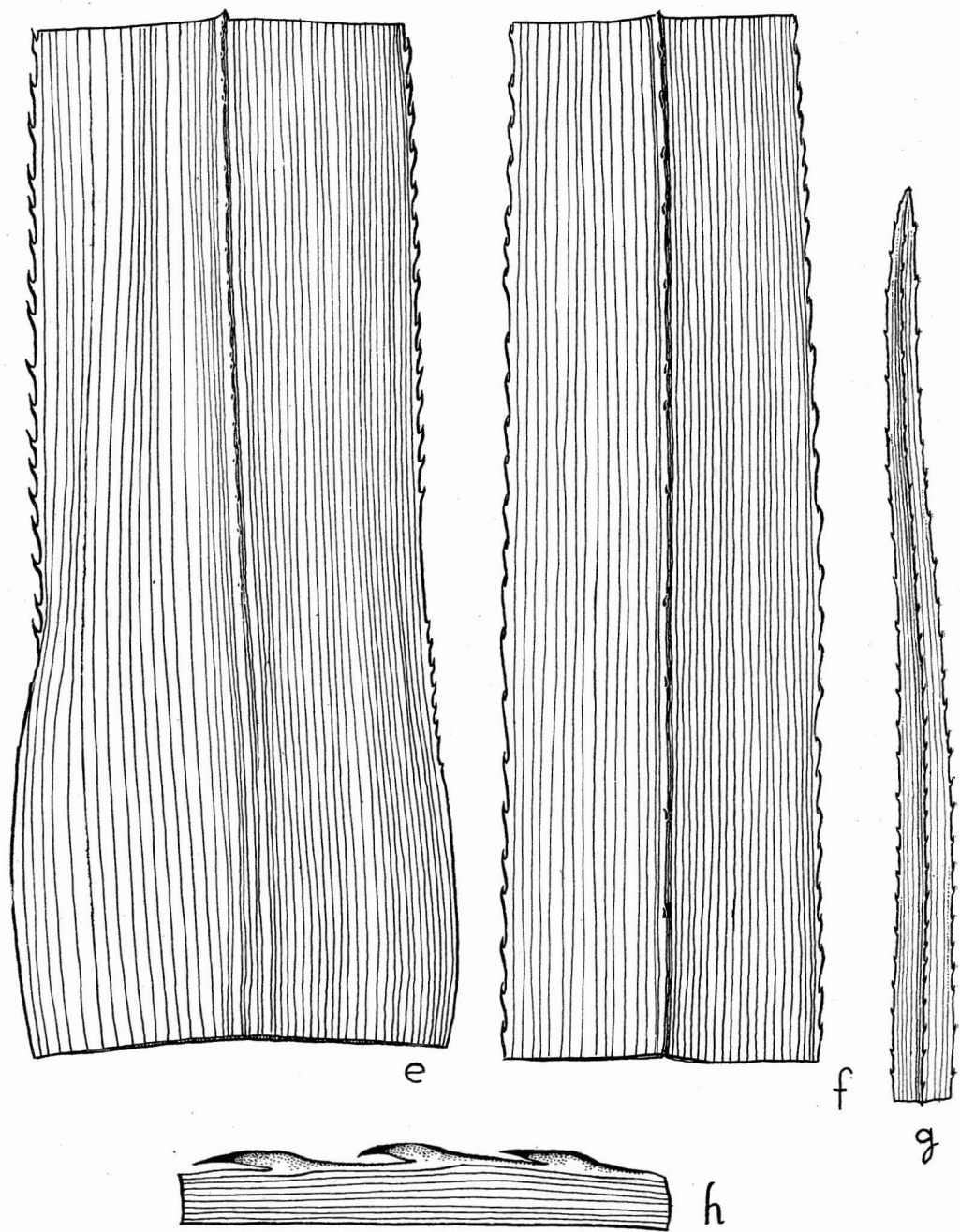


FIG. 11. *a, b*, Phalange, lateral view, × 1; *c*, phalange, longitudinal median section, × 1; *d*, phalange, apical view, × 1; *e*, leaf base, lower side, × 1; *f*, leaf middle, lower side, × 1; *g*, leaf tip, lower side, × 1; *h*, marginal teeth of leaf near base, × 4.



in sicco brunneo lucido cum 5–8 angulis eprominentibus lateribus laevibus lucidis subplanosis sinibus lateribus subcausis dimidia supera libera apice convexo et 7–24 mm. lato, apicibus liberis carpelorum anguste conicis eis centralibus erectis sed eis marginis extus curvatis sinibus centralibus 3–5 mm. profundis, 40% phalangiorum cum 1–3 carpelis lateralibus parvis abortivis et 40% minoribus, carpellis 5–11; stigmatibus apicalibus 2–3 mm. longis suborbicularibus vel ovatis fissis centripetalibus in 45° obliquis, mesocarpio apicale fibroso et cavernoso, mesocarpio basale fibroso et carnosio, endocarpio mediale osseoso obscure mahoganibrunneo gracile 1–2 mm. crasso, seminibus 12–16 mm. longis 5–7 mm. latis oblique ellipsoideis.

DIAGNOSIS OF HOLOTYPE: Tree 10 m. tall, 30 cm. in diameter, round-topped; longer leaves 92 cm. long, 5.4 cm. wide, ligulate, long tapering to an apparently acute apex, at basal attachment only slightly broadened, subcoriaceous, the midrib unarmed on the lower third, near the middle with ascending yellowish acicular appressed teeth 1.5–2 mm. long, 14–38 mm. apart, on the upper third the teeth 1 mm. long, 1.5–4 mm. apart, black; the margins at base unarmed, near the lower quarter the teeth 2–2.5 mm. long, 2–7 mm. apart, appressed subulate yellowish; those near the middle similar but black; those of the upper quarter like those on the adjacent margins; heads terminal, size and shape not recorded; phalanges 6–6.2 cm. long, 2.3–3.7 cm. wide, 2.1–3 cm. thick, oblance-ellipsoid, a little compressed, the surface (when dried) brown, smooth, shining, with 5–8 slight angles, the sides shining, smooth, nearly plane, the sutures between the lateral carpels mostly invisible, only a few of them with distinct furrows about half as long as the phalange, upper half free and marked with numerous

longitudinal light-colored cracks, the sides curving upward like an ellipse, the apex convex and 7–24 mm. wide, the free carpel apices narrowly conic, the central ones erect, the marginal ones curved, diverging, the central sinuses 3–5 mm. deep; of the phalanges 2/5 show 1–3 small abortive lateral carpels about 2/3 as long as the fertile ones; carpels 5–11; stigmas apical, 2–3 mm. long, suborbicular to ovate, creased, centripetal, oblique, at about 45° facing the center; apical mesocarp fibrous and cavernous; basal mesocarp fibrous and fleshy; endocarp median, bony, dark mahogany brown, forming a thin coating only 1–2 mm. thick; seed 12–16 mm. long, 5–7 mm. wide, oblique ellipsoid.

HOLOTYPE: Oeno Island, Tuamotu Archipelago, forest on coral sands, 3 m. alt., June 23, 1934, *H. St. John & F. R. Fosberg 15,197* (BISH).

In the Bishop Museum there is another collection from Oeno, 1922, *E. H. Quayle 410*. The leaf has larger, coarser, more widely spaced, marginal teeth. It might be a leaf from a vigorous seedling of this species, but the collection lacks fruit, so it will be left undetermined.

A similar plant is *P. odoratissimus* L. f. var. *oahuensis* Martelli from Hawaii, but this has phalanges 6.5 cm. long; and the carpel apices inflexed and low, broad pyramidal.

More similar is *P. Mei* F. Br. which has phalanges 7 cm. long, 2.5 cm. wide, the six carpels with apices convex; stigmas 4 mm. in diameter, reniform, horizontal; endocarp walls 2.5–5 mm. thick. This occurs on Hivaoa, Marquesas Islands.

The specific epithet is coined from the Latin, *ferula*, a splint; *fero*, to bear. It is formed in analogy to the splints or vestigial digit bones in a horse's leg, since the *Pandanus* phalanges often bear abortive marginal carpels, suggestive of the splint bones of a horse.